

IV.D. Narrative Information Sheet

1. Applicant Identification:

Municipality of Barranquitas
Section 250
Barranquitas, PR 00794

2. Funding Requested:

- a. Assessment Grant Type: Community-wide
- b. Federal Funds Requested:

- i. \$300,000
- ii. We are not requesting a Site-specific Assessment Grant waiver of the \$200,000 limit.
- c. Contamination: Hazardous Substances (\$150,000) and Petroleum (\$150,000)

3. Location:

- a. Municipality of Barranquitas
- b. Barranquitas
- c. Puerto Rico

4. Property Information for Site-Specific Proposals: Not applicable

5. Contacts:

a. Project Director:

Mr. Angel Marrero
Director of Federal Programs
(787) 857-2065
amarrero@barranquitas.pr.gov
Section 250
Barranquitas, PR 00794

b. Chief Executive/Highest Ranking Elected Official:

Hon. Elliot Colon Blanco, Mayor
(787) 857-2065
ecolon@barranquitas.pr.gov
Section 250
Barranquitas, PR 00794

6. Population: 29,237 (2013-2017 American Community Survey 5-Year Estimate)



7. Other Factors Checklist:

Other Factors	Page#
Community population is 10,000 or less.	
The applicant is, or will assist, a federally recognized Indian tribe or United States territory.	
The priority brownfield site(s) is impacted by mine-scarred land.	
The priority site(s) is adjacent to a body of water (i.e., the border of the priority site(s) is contiguous or partially contiguous to the body of water, or would be contiguous or partially contiguous with a body of water but for a street, road, or other public thoroughfare separating them).	Pages 2-4
The priority site(s) is in a federally designated flood plain.	Page 2
The reuse of the priority site(s) will facilitate renewable energy from wind, solar, or geothermal energy; or will incorporate energy efficiency measures.	Pages 3-4
30% or more of the overall project budget will be spent on eligible reuse planning activities for priority brownfield site(s) within the target area.	

¹Because Applicant is a municipality (similar to a county), population data is reported in census tracts in which each priority site is located.



GOVERNMENT OF PUERTO RICO

Department of Natural and Environmental Resources

NOV 07 2019

Hon. Ángel I. Marrero Ortiz

Mayor
Municipality of Barranquitas
Apartado 250
Barranquitas, Puerto Rico 00794

Honorable Mayor Marrero Ortiz:

**MUNICIPALITY OF BARRANQUITAS ACKNOWLEDGEMENT LETTER FOR THE INTENTION TO APPLY FOR
FY-20 US EPA BROWNFIELD'S PROGRAM FOR A COMMUNITY-WIDE BROWNFIELD HAZARDOUS
SUBSTANCES AND PETROLEUM ASSESMENT GRANT**

The Department of Natural and Environmental Resources (DNER) Superfund Program has received a letter from the municipality of Barranquitas informing its intention to apply for a Community Wide Brownfields Hazardous Substances and Petroleum Assessment Grant. DNER acknowledges and supports the initiative taken by the Municipality. The identification, inventory development, assessment, cleanup and redevelopment of Brownfields sites will provide an opportunity to enhance the social, economic and environmental conditions in this municipality.

DNER encourages the municipality to maintain an open communication with federal and state agencies and to request any support needed.

If you have any questions, please feel free to contact Eng. Melvin Menéndez Figueroa, Environmental Emergencies Response Area Manager, at (787) 767-8181, extensions 2400, 2401 or by e-mail at melvinmenendez@jca.pr.gov.

Cordially,

Tania Vázquez Rivera, Secretary

MMF
MMF

c Teresita Rodriguez, USEPA



IV.E. NARATIVE/RANKING CRITERIA

IV.E.1 Project Area Description & Plans for Revitalization, a. Target Area & Brownfields, i.

Background & Description of Target Area: The Municipality of Barranquitas (Municipality) is situated in the central region of Puerto Rico (PR), 20 miles southwest of San Juan. Founded in 1803, our municipality is a rural, working-class community known as a farming community. Our economy was vibrant, in part, due to Section 936 (936 exemption) of the US tax code, which incentivized US companies to operate on the island through valuable tax exemptions. These incentives remained in place until the federal government eliminated them in 2006, causing many companies to leave PR for more tax-friendly countries like Singapore and Ireland. These losses drove Barranquitas into a deep recession that has lasted over a decade, leading to job losses and population decline as people left for the US mainland for employment. Those fortunate to have employment are paid less relative to the cost of living. While the cost of living has increased 18% from 2000-2017, our residents have seen a 3.6% decrease in household income over the same period. Many residents still feel the impacts of these losses.

In September 2017, Hurricanes Irma and Maria ravaged Barranquitas, adding extreme socioeconomic and financial pressures to our already strained municipality. Maria's devastating winds destroyed buildings, and torrential rains combined with the steep, sloping terrain caused catastrophic landslides that blocked roads for months, nearly cutting our community off from any assistance in that time. 100% of the electric power and 95% of our drinking water services were destroyed, 6,000 homes and 65 commercial properties (many of which are now brownfields) were damaged as was over 75% of the transportation infrastructure. These properties may have released chemicals like lead paint, petroleum, and other environmental hazards. The storm followed a decade-long economic decline as evidenced by population loss, business closures, and abandoned homes. The Center for Puerto Rican Studies estimates a 14% population decline after Maria (2017 to 2019) as residents migrate to the US mainland for better employment opportunities rather than return to their shattered lives in Barranquitas. We are still enduring a difficult job market with dozens of employers unable or unwilling to reopen businesses after Maria, driving our current unemployment to 8.8% compared to 3.5% in the US (9/19, Bureau of Labor Statistics). These challenging conditions have resulted in numerous brownfields in our community as businesses close and causing redevelopment of older brownfields to slow as resources have been reallocated to more urgent needs.

As employers shuttered their doors after the 936 exemption repeal and hurricanes marred our community, brownfields have steadily become more prevalent in Barranquitas. Municipality officials state that criminal activity in the target areas is 2X more common than in the remainder of Barranquitas. The worst-hit areas, where redevelopment investment has the greatest potential, are the PR/152 Corridor (Corridor) and the Commercial/Industrial District (CID). These are the target areas where grant funding will have the greatest impact. A focused effort has been made to invest in the target areas, creating detailed reuse plans to maximize investments and leverage additional funding. If properties outside the target area become high priority during the cooperative agreement period, we may choose to invest grant funding on them as well; however, the redevelopment focus for this grant will remain the Corridor and the CID.

The Corridor – Stretching 17 miles long, the Corridor extends northeast to southwest through the heart of Barranquitas and is a main commercial artery and primary link to San Juan, the largest commercial and industrial center in PR. Because of this linkage, it is critical that the Corridor maintain a diverse mix of commercial, industrial, and residential development. Unfortunately, after the 936 exemption repeal, many businesses closed, leaving residents struggling to make ends meet (60.7% in poverty compared to US at 14.6% (2017 American Community Survey 2017 Estimates (ACS))). Due to months of power outages and lack of workforce/financial resources, many businesses along the corridor could not reopen after the storm. Along PR152, the once-thriving Job Corps School never reopened and the hospital, closed several years before Maria, shows little hope of redevelopment.

The CID – Located in the central sector of Barranquitas, the CID is the most urbanized area of the Municipality, and where the vast majority of commercial and industrial activity occurs. Unfortunately, because of this, the CID was also hardest hit by the 936 exemption repeal. The CID workforce decreased by 8.5% from 2010-2017 (US Census). Those still working are doing so for significantly less. According to the ACS, the Median Household (MHI) is \$18,320, well below that of

PR (\$19,775) and 1/3 of the United States (\$57,652). Five large manufacturing facilities have closed since the 936 exemption repeal, eliminating 2,000 CID jobs. Further, after Maria hit, many CID businesses who closed were never able to reopen. The CID is the location of two priority sites including the Textile Manufacturing facility and the Intermediate Urban School.

IV.E.1.a.ii. Description of the Priority Brownfield Site(s): Barranquitas' economic decline described above resulted in an abundance of brownfields. The target areas have a significantly higher concentration of brownfields compared to the rest of our community with the highest priority sites listed in Table 1 offering the greatest opportunity for successful redevelopment. For example, redevelopment of the Textile Manufacturing facility remains undeveloped due to fear of contamination, with potential hazardous chemicals impacting CID residents. Reuse as an advanced manufacturing facility will fill a critical need after the devastating impacts of the hurricanes, making this site one of our highest assessment and redevelopment priorities. Although we have worked hard to address brownfields, dozens remain, including former schools, a former wastewater treatment plant, closed factories, and a former hospital, that force already financially stressed residents to suffer through the remaining blight that remains. The historical uses our priority sites, likely environmental issues, and potential health effects on those exposed to these uncontrolled sites are summarized in Table 1 below.

Table 1	Priority Sites, Size & Proximity to Target Area Residents/Near Water Body	Historic Use/Current Use & Condition/Planned Reuse (further discussed in Section IV.E.1.b.i.)	Suspected Contaminants*
	Job Corps School – PR152, ±21 acres, adjoins low income & minority residential	Former School / vacant, damage from hurricane / Future Hotel	asbestos, lead paint, petroleum, mercury, VOC's, PCB's
	Former Sewage Plant – PR152, 9.6 acres, adjoins low income & minority residential	Former sewage plant / vacant, deteriorating structure damaged by hurricane / Future low-income housing development	VOCs, PAHs, metals, petroleum, asbestos, PCBs
	Textile Manufacturer – Calle Barcelo, 5.5 acres, adjoins low income & minority residential	Former manufacturing facility / vacant, some hurricane damage to structure but can be restored for reuse / Future advanced manufacturing (solar panel) facility	VOCs, PAHs, metals, asbestos, PCBs
	Intermediate Urban School – Calle Milton Perelez, 2.7 acres, adjoins Barranquitas River/in river flood plain, low income & minority residential	Former school / vacant, deteriorating structure full of debris, heavily damaged by hurricane / Future farmer's market and park	asbestos, lead paint, petroleum, mercury, VOC's, PCB's
	Former Hospital – ±0.75 acres, 150' from Barranquitas River, within low income & minority residential	Healthcare facility / vacant, deteriorating structure / Future commercial development	asbestos, lead paint, petroleum, mercury, VOC's, PCB's
<i>*According to the Agency for Toxic Substances and Disease Registry (ATSDR), the contaminants listed in Table 1 pose a real threat to human health. Health threats include: skin damage, liver, kidneys, heart, spleen, nervous, respiratory, hormonal, blood, and immune systems, and may also cause neurological damage, birth defects and cancer (www.atsdr.cdc.gov).</i>			

These sites are our highest priorities because they meet immediate needs in our community, align with our revitalization plans, and redevelopment is imminent. A redevelopment plan has already been prepared for the target areas' priority sites (IV.E.1.b.i). Increasing our low income housing stock will help those hardest hit by job losses and the hurricanes, adding a hotel will stimulate our tourism market, and adding a new commercial and industrial development will improve job availability and encourage residents to work locally, keeping tax revenues in Barranquitas. Once redeveloped, they will serve as examples of success, triggering more investment. With the EPA's grant funding the initial, high-risk due diligence investment, the likelihood of a successful redevelopment is much higher.

IV.E.1.b. Revitalization of the Target Area, i. Reuse Strategy & Alignment with Revitalization Plans:

The 2012 Barranquitas Territorial Plan (Revitalization Plan) specifies the redevelopment of existing vacant and underutilized urban space (brownfields redevelopment) as a critical initiative, creating greatly needed low and moderate income housing, modern commercial and industrial development, and increased tourism focused development throughout our municipality, but particularly in the target areas. Our Revitalization Plan calls for land reuse that addresses economic and environmental concerns while also addressing equity issues for residents, primarily low-income residents and minorities. We were beginning to put the pieces in place to implement a strategy of creating modern, commercial development, industrial investment, and housing that balances social, economic and environmental interests in an initiative to create sustainable, lasting development. Then hurricanes Irma and Maria struck and the extreme logistical, financial, and physical toll that they levied on our community, which caused a significant setback. However, we are recovering and are now ready to get our Revitalization

Plan back in motion.

Per our Revitalization Plan, we will diversify and modernize our small but burgeoning industrial sector to minimize the impacts of future employer cutbacks/closures and to create modern commercial development and affordable housing. This in turn will provide location options for support services for the industrial base of the area and residential options desperately needed in these areas of our community. Our Revitalization Plan calls for an increase in low-income and elderly housing, providing residential stock constructed with modern techniques for those people hardest hit by the devastation of the hurricanes. These redevelopment activities will directly address our greatest needs by adding jobs and residential options and will encourage people to return to Barranquitas from the mainland to participate in and benefit from the reconstruction of our community.

Barranquitas is requesting \$300,000, most of which will be used for Phase I and Phase II Environmental Site Assessments (ESAs), providing the initial, highest risk investment necessary for brownfields redevelopment. Funding will also be committed to improving/reprioritizing a recently created inventory and conducting cleanup planning activities. This approach will maximize grant value and trigger further environmental and redevelopment work with other funding as noted in IV.E.1.c.i. For example, plans are underway to redevelop the Textile Manufacturer into a solar panel manufacturing facility, creating advanced manufacturing jobs. This development will bring an estimated \$10M in investment to our community and will also encourage the generation and use of renewable energy, helping us become the leader in green energy in the Central Mountain region and reducing the impacts of future hurricanes on our power grid. Putting redevelopment resources in the heart of the target area will set an example and maximize the likelihood of growth and redevelopment in this struggling area of our community. EPA-funded assessment of property will help leverage funding for its revitalization and create an important development in an area where redevelopment success is badly needed. Development of the Sewage Plant into low-income housing will meet another important need due to the scarcity of residential options after Maria damaged so many homes. The redevelopment of the Job Corps site into a hotel will help stimulate our burgeoning ecotourism economy and reuse of the hospital as a commercial property will create jobs and eliminate blight. Reusing portions of the Intermediate Urban School into a farmer's market will capitalize on the rich and extensive farming history of our area and adding municipal park space in the remaining school property will create a generate more jobs, increase the quality of life of area residents, and help attract top employers looking to locate in areas with high quality amenities as outlined in our Revitalization Plan. Short term construction jobs will be created, and permanent jobs will be in place once the planned redevelopment of the priority sites is complete (IV.E.1.b.ii).

IV.E.1.b.ii Outcomes & Benefits of Reuse Strategy: Reuse of brownfields will generate more tax revenue for the Municipality. All 5 priority sites are located in an Opportunity Zone (OZ), making the redevelopment of these sites attractive to investors. Currently, at least 2 Opportunity Funds have been established and are making investments in Puerto Rico (Puerto Rico Opportunity Fund & Wefunder Puerto Rico Opportunity Fund), and we will work with these funding resources and developers to further facilitate investment in our brownfields. Through increased investment, jobs will be created, new residential units will be constructed, and property values will be enhanced. Sites located in OZs will be marketed as such, ensuring that OZ investors are aware of the value brownfield reuse brings. Based on previous, similar development projects in our community, the full redevelopment of Table 1 sites will create 250+ high-value jobs and an estimated \$150K in annual tax revenue. Using these sites as examples, this success story can be duplicated on other sites in the community. For example, reuse of the Former Sewage Plant will remove real and perceived environmental contamination (VOCs, PAHs, metals, petroleum, asbestos, PCBs, etc.). Blight will be eliminated, removing the lure for crime that the abandoned property invites. This site could again become a viable asset to the community once its redeveloped into low income housing (estimated housing 125 units). Temporary jobs would be created through construction work to remediate and redevelop the site. Low-income housing will stimulate other area investment from the private sector, creating permanent jobs in the surrounding area. New commercial development on the hospital site will create jobs and eliminate blight and an environmental threat to the nearby Barranquitas River. Reuse of the Textile Factory as a solar panel manufacturer will create permanent, high wage, clean manufacturing jobs while encouraging the development of green infrastructure, and the reuse of the Job Corps site as a hotel will grow our

tourism industry, bringing more investment revenue to our community. Creating a farmers market and park on the former Intermediate Urban School site will eliminate another environmental threat to the Barranquitas River, bring prosperity to our rural farmers, and add valuable amenities to our municipality. As brownfields are redeveloped, employment and revenue losses will be eliminated, to be replaced by economic growth throughout the community. EPA grants will help leverage the necessary funding for these planning and redevelopment efforts, creating high value jobs (estimated 250+), affordable housing (estimated 125 units), tourism resources, commercial development, and municipal assets, which are all in line with our Revitalization Plan. New, energy efficient construction on priority sites will reduce energy usage and operating cost on sites where new construction is planned (Intermediate Urban School, Sewage Plant, Hospital) which will create jobs, repatriation, and increase wages for Barranquitas residents.

Brownfield assessments will be linked to successful redevelopment outcomes such as reduced environmental justice concerns by eliminating contaminant exposure pathways, especially in areas of low income and minority populations. Health indicators such as the increased cancer (respiratory system, liver, thyroid) and infant mortality (IV.E.2.a.ii(2)) will no longer be influenced by environmental impacts caused by Corridor and CID brownfields. Affordable housing will be created, improve economic competitiveness of target areas, create sustainable, commercial developments and land recycling opportunities, leverage current and future investments, and create healthy, safe neighborhoods. Residents and commercial property owners will benefit from increased property value, improved energy efficiency, and lower maintenance costs associated with new construction. This will be accomplished in areas where low income and minority populations are highly concentrated, supporting environmental justice goals.

IV.E.1.c. Strategy for Leveraging Resources, i. Resources Needed for Site Reuse: Barranquitas is eligible for and will seek additional funding from the following sources: EPA Brownfield Clean-up grant funding, US Dept. of Agriculture, CDBG, CDBG-DR (Disaster Relief), FEMA, US Economic Development Administration (USEDA), Dept. of Transportation grants, and new funding opportunities/incentives available in the future. Funding from these resources are available for remediation, demolition, site development, public infrastructure improvements, streetscape improvements, building rehabilitation, job training, etc., to encourage and complete our redevelopment strategies. Barranquitas plans to seek CDBG-DR funding to demolish the intermediate school, the sewage treatment building, and the hospital. Should EPA funds be awarded for environmental assessment, the EPA grant may qualify as the required match to the CDBG-DR funding, further leveraging funding resources to successfully redevelop these priority brownfields. FEMA funding will be sought to help develop housing on the sewage treatment site as well. Army Corps of Engineers resources will be used to improve the flood control measures on the Barranquitas River and reduce the threat of landslides, Dept. of Transportation to make road improvements along the Corridor, and the USED A to incentivize job creation.

We will also seek funds from the Puerto Rico Economic Incentives Act which will be used to encourage investment and development of manufacturing and commercial businesses as planned for some of our brownfields. All target properties are located within an Opportunity Zone (OZ), and we will market brownfields as excellent tax shelters under OZ tax incentives, attracting private funds in our low-income areas. We have identified 2 Opportunity Funds in Puerto Rico and will engage them as brownfield redevelopment progresses. We will also attract investors using tax credits through New Markets Tax Credit Benefits. Using EPA funding for the initial high-risk environmental assessment of these sites, brownfield redevelopment will be successful. As properties are assessed, we will work in partnership with many agencies and entities (HUD, FEMA, PR Dept. of Housing, PR Dept. of Economic Development & Commerce, etc.) to fill in funding gaps such as demolition funding and redevelopment incentives, ensuring successful redevelopment. A unique, detailed funding plan will be developed based on individual status and eligibility for each brownfield site or area as assessment projects are realized.

IV.E.1.c.ii. Use of Existing Infrastructure: The PR152 corridor is the most heavily traveled in the municipality and provides connectivity from San Juan to the south side of the island. Modern utility infrastructure follows the Corridor's path, providing available connectivity to all new development. Although, Maria damaged many power lines and roads, they have since been repaired in the CID and

Corridor. Our utility infrastructure is large and robust enough to handle the added capacity and need required by the planned redevelopment of the target areas. Redevelopment will utilize existing infrastructure such as roads, curb cuts, nearby utilities, and commerce routes (San Juan to southern Puerto Rico) to attract new investment in area brownfields, reducing site redevelopment costs. With revitalization ranging from residential to manufacturing, existing infrastructure will allow for easy access to commercial/industrial development, enabling residents the opportunity to work and live in the same neighborhood. For example, existing infrastructure currently servicing the Job Corps site adequately provides the service requirements to complete the site's planned hotel development. If additional infrastructure is needed, we will utilize a combination of local funding, when available, CDBG, US Dept. of Transportation Better Utilizing Investments to Leverage Development (BUILD) Grant program, and FEMA funds to meet the development's infrastructure needs.

IV.E.2. Community Need and Community Engagement, a. Community Need, i. The Community's Need for Funding:

Barranquitas does not have the funds to complete this work in our general budgets. The only available resource to address brownfield redevelopment is federal funding. The PR economy has experienced over a decade of setbacks, resulting in significant economic decline, and culminating with the devastation brought by Hurricane Maria. Fewer jobs, reduced tax revenues, repairs to damaged municipal buildings and infrastructure, and hurricane debris cleanup has further limited local government resources. We estimate the tax losses locally to be \$2M, and 750 jobs were lost after Maria alone. The Municipality operates on a \$11M annual budget, which can't fully fund essential services, let alone much needed infrastructure repair and maintenance. Simply collecting debris from the hurricanes was \$2.5M. Brownfield sites add to the financial burden borne by target area residents, suppressing residential property values, and adding to municipal expenditures through reduced tax base and additional public safety services to brownfield sites for criminal activity as indicated by the doubled crime rate in the Corridor compared to Barranquitas as a whole. Because of the decade long recession experienced island wide, capped by the destruction of Irma and Maria, the territorial government has no resources to commit to brownfields redevelopment. Moreover, local governments in PR don't have funding resources commonly available to local governments on the mainland (e.g. Tax Increment Financing), so incentivizing redevelopment through payment of environmental due diligence is attractive to developers, but we have no tools available at a local or territorial level.

IV.E.2.a.ii. Threats to Sensitive Population, (1) Health or Welfare of Sensitive Populations:

Barranquitas has a very high population of minorities and poor, especially children and elderly. 37.8% of our residents are either children or the elderly. Other sensitive populations are also impacted. 26% of our population suffers from a disability, over twice the percentage of the US (12.6%). Contaminants such as metals, petroleum, VOCs, SVOCs, PAHs, PCBs, glycols, lead paint, and asbestos are potentially causing as yet unknown harm to these people, raising significant environmental justice issues. The result is the exposure of a large number of our less fortunate residents to soil, water, and air contamination present on these brownfields with little ability to improve their condition. For example, the Former Hospital site, located adjacent to a low-income, minority neighborhood, is potentially impacted with asbestos, lead paint, mercury, VOC's, PCB's, and other contaminants known to cause various cancers and infant mortality which are experienced by Barranquitas' residents at a much higher rate than the nation (IV.E.2.a.ii(2)). The proximity of such a large number of brownfields to low-income neighborhoods in our target areas drives down housing values, suppresses commercial investment, and limits residents' access to adequate employment, resulting in a distinct disadvantage to target area residents with no real relief in sight, if nothing changes.

This grant will help our community better understand the environmental conditions at our brownfields and help reduce the risk of exposure, eliminate sources of contamination, improve the ecological health of our community, and incorporate livability and equitable development principles.

IV.E.2.a.ii(2) Greater Than Normal Incidence of Disease & Adverse Health Conditions: All of our priority sites are known or believed to be impacted by asbestos. Studies on the health effects of exposure to asbestos has been linked to higher incidences of respiratory system cancer, which in Barranquitas (21.9/100,000) are 100% higher than PR (PR Cancer Registry). Job Corps, the Sewage Plant, the Intermediate Urban School, and the hospital sites are known or believed to be contaminated

with petroleum, which is known to affect the liver. Liver and bile duct cancer incidents in Barranquitas is 88% higher than in PR. In addition, PCBs, mercury, and VOCs on target area sites may be contributing to thyroid cancers in residents, which are 48% higher in Barranquitas than in PR. Moreover, lead and other metals, as well as VOCs, PAHs, and petroleum constituents are believed to be present on priority sites. These are known to be a threat to unborn children and infants, and the infant mortality rate in PR is 25% higher than the US according to the CDC. Although infant mortality data is not available at the municipality level, this data is representative of Barranquitas.

Currently, there are 35 properties in the Municipality that have environmental records in the EPA's EnviroFacts database. Nearly half (46%) of the housing stock in the Municipality was built prior to 1979 according to the 2017 ACS and older homes have a greater risk for high lead levels from paint. Because of the presence of toxic chemicals and their inevitable impact on the environment near residents' homes, many operating commercial and industrial facilities add to the environmental threat. Removal of environmental contaminants at brownfields in our community will reduce exposure of our residents, which will help to reduce the disproportionate incidences of disease and other poor health outcomes that disadvantaged populations are currently experiencing. The first step is assessment of the environmental conditions of target area brownfields. Funding from this EPA grant will initiate the revitalization of the CID and Corridor by providing that initial infusion of capital to clarify the environmental conditions of brownfields, reducing the hesitation of developers to invest in redevelopment in our community. The subsequent transformation of brownfields into productive residential and commercial properties will result in better overall health for the community.

IV.E.2.a.ii(3) Disproportionately Impacted Populations: The public health impact from target area brownfield properties and industrial operations, and their proximity to impoverished and minority residents has disproportionately exposed them to environmental pollutants such as lead, VOCs, asbestos, PCBs, etc., resulting in an inability to improve or in some cases, maintain their health and wellbeing. Per the Urban Institute/Center on Society and Health (2015), low-income residents become sick more frequently and more quickly, and die at younger ages on average than those in more affluent communities. For decades, Barranquitas has suffered extraordinarily low wages and a very high poverty rate. The devastation left by the hurricanes added unprecedented financial burdens to our already poor residents through storm damage costs, loss of work, loss of basic necessities, and very slow recovery. The loss of once thriving industries has left a void in the community, especially in the Corridor and the CID. According to the 2017 ACS, 60.7% of Barranquitas residents live in poverty compared to 44.9% and 14.6% for PR and the U.S. respectively. 77.8% of our children live in poverty, and extremely low income is even more prevalent in the CID and Corridor, where the MHI is \$18.3K and \$16.7K respectively, far below the US (\$57.7K). It is clear that target area residents suffer dramatic wage disparities. The EPA's EJScreen tool indicates that the target areas are in the 95-100th percentile of US citizens in close proximity to Ozone and PM 2.5 pollution. Our impoverished and minority residents are at a distinct disadvantage, and there is little incentive for residents to maintain their own properties, let alone contribute meaningful change to their community, resulting in significant environmental justice concerns.

The EPA grant will reduce threats by funding environmental investigation work needed to trigger redevelopment on priority sites. New jobs in the target area will create gainful employment for target area residents. Increased employment, higher wages, and new development on brownfield properties will create a sense of pride and ownership of the neighborhood, incentivizing investment in other area properties. New tax revenue will be generated and subsequently reinvested in the community, multiplying investment in the Corridor and the CID. Funding from an EPA grant will help stimulate investment in brownfield properties by funding environmental due diligence tasks that are a common stumbling block for land recycling in our community, greatly improving the economic status and health of residents near brownfields.

IV.E.2.b. Community Engagement, i. Project Partners & ii. Project Partner Roles: Several community partners have pledged a supporting role for our brownfields program (Table 2). This assemblage of community groups is best suited to engage the community at a grass roots level. They also have regional influence and local ties, maximizing the benefits they bring to the project.

Table 2 – Project Partners

Partner Name	Point of Contact	Specific Role in the Project
PD Properties	Rafael Zayas 787-225-5908	Local development organization focused on low income housing. Plans to continue to invest in low income housing development in the target area who will assist with development planning/needs analysis for low income housing, provide input in redevelopment process, & help with inventory/prioritization.
Salvation Army Long Term Recovery	Kelvin Ramos 787-396-1153	Faith based organization committed to addressing unmet needs after 2017 hurricanes in PR. Will participate in community engagement events, help with inventory/prioritization, and assist with reuse planning
Parroquia San Antonio de Padua Church	Lucy Milagro 787-857-3595	Local church in target area. Will provide community engagement meeting space, share info about and participate in community engagement events
Cooperativo De Ahorro Y Credito	Miguel Ortiz (787)-857-3500	Non-profit credit union serving the local community with financial assistance to help facilitate brownfields redevelopment. Will share info about and participate in community engagement events, provide financial guidance regarding brownfields redevelopment projects, provide input regarding reuse planning
Downtown Barranquitas Community Support Group	Rosabel Colon 939-244-9275	Downtown Barranquitas advocacy group (in target area) focused on growing downtown business. Will assist with inventory and prioritization process, provide redevelopment input, and participate in community engagement events.

IV.E.2.b.iii. Incorporating Community Input: Barranquitas has a well-established culture of community involvement that we will maintain for this grant. Our most recent community engagement event was held on November 25, 2019, to inform residents of the planned grant effort. 4-6 public meetings will be held throughout the grant period to maintain stakeholder engagement and continue to gather input on site selection, prioritization, assessment needs, cleanup decisions, any mitigation measures from the cleanup and redevelopment activity, and reuse planning. Public meetings will be advertised through municipal and partner websites, local papers, radio, and social media platforms (earned media and other low-cost/no-cost, or in-kind methods) ensuring that the entire community has an opportunity to provide input. Because we have a significant non-English speaking population, Barranquitas has multi-lingual personnel on staff who will interpret presentations and translate documents in Spanish and English. We've already begun engaging target area residents, business owners, and community advocates to solicit their input regarding our brownfield reuse project and will continue to do so throughout the grant period. A public meeting will be held in the first two quarters of the grant period to discuss the goals, planned activities, and a schedule for future community involvement. For subsequent meetings, personal invitations will be sent to residents directly impacted by priority sites, neighborhood groups, lenders, area businesses, and developers to maximize stakeholder engagement. We will contact regional developers to bring awareness of the reuse opportunities the priority sites offer. When developers are identified, they will attend public meetings to share their plans for redevelopment. Municipality staff will catalog stakeholder input for use as a reference when determining assessment and redevelopment priorities. As the project progresses, we will actively involve stakeholders in the decision-making process regarding site prioritization, assessment, site marketing, cleanup planning, and feedback on site reuse.

Task/Activity 1: Program Management, Training Support, Brownfield Inventory/Prioritization

i. Project Implementation: Municipality staff will travel to regional and national brownfields conferences/meetings, participate in calls, meetings, and correspondence between the Municipality, QEP, EPA, etc. to manage the grant's cooperative agreement. ACRES database will be updated quarterly or more frequently if needed. We will carefully track contractor costs, comparing to the budget, expenditures, and project progress. This will ensure that grant funds will be successfully utilized within the prescribed three-year project period. The Municipality, with QEP support, will also update/prioritize the inventory under this task.

ii. Anticipated Project Schedule: QEP selected through a competitive bidding process before Cooperative Agreement period begins; correspondence will occur at least monthly (more frequently as specific project activities require) throughout the grant period; update and prioritize brownfield inventory the first 2 quarters, then as necessary for the remainder of the grant period; ACRES updates will be conducted at least quarterly throughout the grant period

iii. Task/activity Lead(s): Barranquitas & QEP

iv. Output(s): Travel-Municipal staff to regional and national brownfields conferences/meetings; prioritized inventory; project performance reports: Quarterly Reports, ACRES Entries, DBE reports,

annual reports, etc.; calls, meetings, and correspondence between the Municipality, QEP, EPA, etc. to manage the grant's cooperative agreement.

Task/Activity 2: Env. Investigation

i. Project Implementation: Eligibility determinations will be completed under this task; The QEP will complete Phase I ESAs activities on sites selected by the Municipality. All Phase I ESAs will be conducted by/in accordance with the ASTM standard for Phase I ESAs (E1527-13) and the All Appropriate Inquiry (AAI) rule. Areas of focus will include those already determined in the inventories as priority sites listed in Table 1; The QEP will prepare a Quality Assurance Project Plan (QAPP) which must be approved by the EPA. Once approved, the QEP, directed by the Municipality, will complete Phase II ESAs (after EPA approval of the Sampling & Analysis Plan/Health & Safety Plan (SAP/HASP) based on environmental conditions identified in the preceding Phase I ESAs.

ii. Anticipated Project Schedule: Request eligibility determinations & finalize site access to initial sites for investigation-early 2nd Quarter of Grant period; Begin Phase I ESAs-2nd Quarter of Grant period; Submit QAPP to EPA for review/approval; QAPP approval & Phase II ESAs begin-3rd Quarter of Grant period; all Phase I ESAs completed-end of 11th Quarter of Grant period; all Phase II ESAs completed, and final contractor invoices submitted-45 days before end of grant period.

iii. Task/activity Lead(s): Barranquitas & QEP

iv. Output(s): 5-6 Phase I ESAs each for haz. substance and petroleum impacted sites; Quality Assurance Project Plan (QAPP), estimated 3-5 Phase II ESAs each for hazardous substances and petroleum impacted sites.

Task/Activity 3: Clean-up Planning:

i. Project Implementation: The QEP, directed by the Municipality, will prepare site specific clean-up plans/documents, including: Analysis of Brownfield Cleanup Alternatives, remediation plans, site closure letter requests, and clean-up funding development (IV.E.1.c.i).

ii. Anticipated Project Schedule: throughout the grant period

iii. Task/activity Lead(s): QEP

iv. Output(s): 5-10 cleanup planning documents

Task/Activity 4: Community Outreach & Involvement:

i. Project Implementation: 4-6 public meetings will be held during the grant period to update the community on brownfield assessment progress and seek public input/involvement. Print and mail material for project/site information and marketing documents may also be funded under this task. The Municipality will complete this task, assisted by the QEP, who will manage the technical aspects of the community outreach program. Social media outlets and other online media will be developed/maintained, and outreach efforts will inform the public on the progress of brownfield investigation/cleanup planning activities and provide marketing resources for future development.

ii. Anticipated Project Schedule: 1st outreach meeting planned for 2nd Quarter of grant period, remaining outreach events planned throughout the rest of the grant period.

iii. Task/activity Lead(s): Barranquitas & QEP

iv. Output(s): 4-6 public meetings to update the community on the brownfield assessment progress and seek public input and involvement; supplies: printed flyers, advertising, postage, etc.

We will work diligently to assure startup activities are completed per the schedule above. The Municipality will allocate all grant funds to project properties before the final quarter of the grant period to assure that grant task activities are completed before the end of the cooperative agreement contract. The Cooperative Agreement period is 3 years, however, because there is an extremely high demand for assessments, it is likely that funds will be spent prior to the end date. If activities occur beyond the priority sites, they will occur after the inventory and prioritization is finalized (early 2nd quarter as indicated above). We are proactively communicating with representatives of privately-owned brownfields to gain access and resolve issues in anticipation of this grant funding as well as non-grant funded assessment activities. Such communication initiates the process for eventual property transfer and redevelopment. These discussions create a positive dialog between property owners, local government, and impacted citizens. Prior to applying for site eligibility under the grant, an access agreement will be prepared and executed for each site being considered.

IV.E.3.b. Cost Estimates: The Municipality will allocate \$242,300 to Phase I and II ESAs, equaling 81% of the total grant funding assigned directly to ESAs. The costs outlined in Table 3 were developed

anticipating tasks necessary to efficiently identify, characterize, and plan for the remediation of the priority sites listed in Table 1.

Table 3 Budget	Budget Categories ¹	1. Program Mgmt, Training Support, Inv/Prioritization	2.Phase I/II ESAs	3. Clean-up Planning	4. Community Outreach & Involvement	Budget Category Total
Haz Subs	Travel	\$1,500				\$1,500
	Supplies				\$100	\$100
	Contractual ²	\$6,000	\$121,150	\$15,000	\$6,250	\$148,400
	Subtotal (Haz)	\$7,500	\$121,150	\$15,000	\$6,350	\$150,000
Petro	Travel	\$1,500				\$1,500
	Supplies				\$100	\$100
	Contractual ²	\$6,000	\$121,150	\$15,000	\$6,250	\$148,400
	Subtotal (Pet)	\$7,550	\$121,150	\$15,000	\$6,350	\$150,000
TOTAL BUDGET		\$15,000	\$242,300	\$30,000	\$12,700	\$300,000

¹Only budget categories with costs in Table. ²In accordance with Federal, Territorial, and local procurement regulations.

The costs outlined in Table 3 above were developed anticipating tasks necessary to efficiently identify, characterize, and plan for the remediation of the priority sites listed in Table 1. Grant tasks will be completed at the anticipated costs per unit with the following anticipated outputs/outcomes:

1. Program Management, Training Support, Inventory/Prioritization - \$15,000 (\$7,500 each for haz. substances and petroleum) – **Travel** (Attend National Brownfields Conf.): airfare x 2 @ \$1,000, 2 rooms, 3 nights lodging @ \$1,400, meals @ \$450, ground transportation @ \$150 = \$3,000), **Contractual**: total \$12,000, includes approximately 104 hrs. \$77/hr. = \$8,000 for inventory, and approximately 52 hours \$77/hr = \$4,000 for program management. In addition, existing funds supporting Municipality staff (\$8,000) will be offered in-kind for this task.

2. Env. Investigation - \$242,300 (\$121,150 each for haz. substances and petroleum) – **Contractual**: 11 Phase I ESAs at an average cost of \$3,500 = \$38,500, & 6-10 Phase II ESAs at an estimated cost of \$20,000-\$40,000 (depending site complexity/environmental conditions) = \$203,800. Though our budget will support 11 Phase I's and 6-10 Phase II ESAs, we understand that large sites may need more investment requiring us to realign the budget during the grant period. Areas of focus will include those already determined in the inventories as priority sites listed in Table 1.

3. Clean-up Planning: \$30,000 (\$15,000 each for haz. substances and petroleum) – **Contractual**: 5-10 clean-up plans expected to cost \$3,000-\$6,000 each = \$30,000.

4. Community Outreach & Involvement: \$12,700 (\$6,350 each for haz. substances and petroleum) – **Supplies**: printed flyers, advertising, grant fact sheets, outreach visual aids, advertising, postage, etc. = \$200, **Contractual**: approximately 162 hours over three years at an estimated \$77/hr = \$12,500.

IV.E.3.c. Measuring Environmental Results: Tracking, measuring, and evaluating progress will be achieved through meeting minutes, Quarterly and Annual Financial Reports, quarterly review/analysis of any grant performance encountered/identified in Quarterly Reports, and completion of Work Plan tasks. If planned outputs/outcomes are not achieved or milestones/project schedule outlined in IV.E.3.a are not being met, we will create a corrective action plan to identify deficiencies and make the appropriate adjustments necessary to achieve the anticipated outputs/outcomes on schedule. Further, the Assessment Grant will have the following measurable results: sites/acreage assessed, jobs created/retained, redevelopment complete, number of parcels, acreage made ready for greenspace/recreation, and leveraged monies. These and other statistics will be included in quarterly reports and ACRES submittals as data becomes available, which will allow the EPA to better evaluate and highlight the grant program success. At the close of the project, the Municipality will provide a final report to the EPA and our residents summarizing project outputs and outcomes.

IV.E.4. Programmatic Capability & Past Performance, a. Programmatic Capacity, i. Organizational Structure & ii. Description of Key Staff: Barranquitas's Department of Federal Programs (DFP) will manage this grant. Assistance will be sought from a qualified consultant to assist in grant management activities, but the majority of programmatic management will be conducted by the municipality. This office has previously managed many other economic development resources valued at over \$20M in the past 10 years, including those listed in IV.E.4.b. The DFP, supported by other municipality staff have the technical, financial, and administrative ability in place to implement this grant project successfully. Mr. Angel Marrero, Director of Federal Programs will serve as the Project Manager and

will handle the day to day programmatic tasks, oversee/manage the work performed by the QEP, and will lead community outreach activities. Mr. Marrero holds a Bachelor's Degree in Engineering and has been with Barranquitas and managing grants for 9 years, 2 as the Federal Programs Director. He has been integral to the success of many other grant programs in which Barranquitas has participated, including those listed in IV.E.b.4.b.ii(1), and has extensive experience managing grant activities for the municipality. Mr. Marrero will be assisted by Ms. Marilyn Santos, also in the Federal Programs Dept. Ms. Santos has worked in the Barranquitas Federal Programs Dept. for 3 years. Marrero and Santos will use their previous brownfield redevelopment and economic development experience to seek redevelopment opportunities for those sites without secured redevelopment contracts. Barranquitas's Director of Finance, William Diaz, will serve as the Grant Financial Manager and will be responsible for accounting and financial reporting. He holds a Bachelor's Degree in Accounting and has worked with Barranquitas' finances for 8 years., including the finances related to federal grants. Mr. Diaz will be assisted by the Barranquitas Department of Finance staff. Staff assigned to this project have all worked for the Municipality for at least 8 years.

The depth of the Municipality's team will allow for a seamless transition to other experienced members. This level of involvement will allow for another member of the team to assume project management duties if it becomes necessary. Municipality staff has a history of working cooperatively with PR and federal environmental agency personnel and engaging qualified environmental consultants. This team will be supported by other municipality departments including finance, utilities, engineering, legal department, and office of the Mayor.

IV.E.4.a.iii. Acquiring Additional Resources: Through a competitive bidding/procurement process, we will select a QEP in accordance with federal procurement regulations (2 CFR 200.317 through 200.326) and with experience with EPA Brownfields Grants and working with the PR Department of Natural and Environmental Resources (DNER). The team and execution plan outlined above will ensure timely and successful expenditure of funds within the prescribed three-year project period. We will pursue funds from multiple federal agencies with the intent to piece together all the necessary funding to successfully redevelop brownfield properties. Some examples of federal funding we will seek include FEMA and CDBG to develop the low-income housing on the Sewage Plant site, CDBG-DR funding to demolish the Sewage Plant, Dept. of Transportation to make road improvements along PR152, and the USED to incentivize job creation. As appropriate, we will utilize visioning sessions and other assistance/advice offered by the Center for Creative Land Recycling (Region 2 TAB program) to maximize the incorporation of community input.

IV.E.4.b. Past Performance & Accomplishments, ii. Has Not Received an EPA Brownfields Grant but has Received Other Federal or Non-Federal Assistance Agreements, (I) Purpose & Accomplishments: Barranquitas has never received an EPA Brownfields grant, however, we have received other federal and non-federal assistance agreements as indicated in Table 4.

Table 4 – Past Federally Funded Assistance Agreements

Funding Source - Date	Project	\$ Received	Outputs/Outcomes
Federal Emergency Mgmt. Agency (FEMA) – 2017/2018	Emergency response after hurricane	\$3.2M	Emergency protective measures, debris removal, generator usage, and emergency infrastructure repairs after hurricane. Included repair of 2 major highways providing connectivity between municipality and rest of PR
Community Development Block Grant (CDBG) - 2019	Low/moderate income housing rehabilitation	\$336,354	Provide financial assistance to those who have lost their homes and/or jobs after hurricanes. Assist 1,500 residents with this program
Federal Transportation Authority (FTA) - 2019	Transportation for elderly and low-income residents	\$85,000	Provide monthly assistance to 100 seniors & low income residents with transportation for daily travel needs and to medical care providers throughout the community

IV.E.4.b.ii(2) Compliance with Grant Requirements: All funding assistance agreement terms and conditions were met for the above-mentioned projects, including reporting of the number of residential units rehabilitated and who/where/how many received benefits under the housing rehabilitation program, financial reports, and quarterly progress reports were completed. All grant goals, outputs, and outcomes (indicated in Table 4) of the previous grants were achieved, and all reports discussed were completed in a timely manner. The Municipality was fully compliant with the terms and conditions of these grant programs and is in compliance with all reporting and performance protocols.

III.B. Threshold Criteria for Assessment Grants

III.B.1 Applicant Eligibility

The Municipality of Barranquitas meets the definition of a Local Government under 2 CFR 200.64 and is a political subdivision of the Territory of Puerto Rico. It is therefore eligible to apply for and receive U.S. EPA Brownfields Assessment Grant funding.

III.B.2 Community Involvement

Involving our community and soliciting feedback regarding Brownfields activities and redevelopment plans are essential to our community's Brownfields program's success. Communication is a two-way process, and our ultimate goal is to keep the community informed and involved so they remain aware of potential concerns, questions and solutions. Barranquitas will utilize social media platforms, earned (free) media and other low-cost, no-cost or in-kind methods to engage the community, solicit public and stakeholder participation, and advertise public meetings. Regular public meetings have already been and will continue to be held to engage the public and encourage stakeholder and residents' participation in the EPA grant funded Brownfield activities. See Section IV.E.2.b. of the Narrative/Ranking Criteria for further information.

III.C. Expenditure of Assessment Grant Funds

This criterion is not applicable as Barranquitas is not a current EPA Brownfields Assessment Grant recipient.

Application for Federal Assistance SF-424

* 1. Type of Submission:

- ☐ Preapplication
☒ Application
☐ Changed/Corrected Application

* 2. Type of Application:

- ☒ New
☐ Continuation
☐ Revision

* If Revision, select appropriate letter(s):

* Other (Specify):

* 3. Date Received:

12/03/2019

4. Applicant Identifier:

5a. Federal Entity Identifier:

5b. Federal Award Identifier:

State Use Only:

6. Date Received by State:

7. State Application Identifier:

8. APPLICANT INFORMATION:

* a. Legal Name:

MUNICIPIO DE BARRANQUITAS

* b. Employer/Taxpayer Identification Number (EIN/TIN):

* c. Organizational DUNS:

0906000240000

d. Address:

* Street1:

SECTION 250

Street2:

* City:

BARRANQUITAS

County/Parish:

* State:

RI: Rhode Island

Province:

* Country:

USA: UNITED STATES

* Zip / Postal Code:

00794-0000

e. Organizational Unit:

Department Name:

Division Name:

f. Name and contact information of person to be contacted on matters involving this application:

Prefix:

Mr .

* First Name:

ANGEL

Middle Name:

* Last Name:

MARRERO

Suffix:

Title:

DIRECTOR OF FEDERAL PROGRAMS

Organizational Affiliation:

* Telephone Number:

7878572965

Fax Number:

* Email:

AMARRER@BARRANQUITAS.PR.GOV

Application for Federal Assistance SF-424

* 9. Type of Applicant 1: Select Applicant Type:

B: County Government

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

* Other (specify):

* 10. Name of Federal Agency:

Environmental Protection Agency

11. Catalog of Federal Domestic Assistance Number:

66.818

CFDA Title:

Brownfields Assessment and Cleanup Cooperative Agreements

* 12. Funding Opportunity Number:

EPA-OLEM-OBLR-19-05

* Title:

FY20 GUIDELINES FOR BROWNFIELD ASSESSMENT GRANTS

13. Competition Identification Number:

Title:

14. Areas Affected by Project (Cities, Counties, States, etc.):

Add Attachment

Delete Attachment

View Attachment

* 15. Descriptive Title of Applicant's Project:

FY20 MUNICIPALITY OF BARRANQUITAS COMMUNITY WIDE BROWNFIELDS ASSESSMENT GRANT FOR HAZARDOUS SUBSTANCES AND PETROLEUM

Attach supporting documents as specified in agency instructions.

Add Attachments

Delete Attachments

View Attachments

Application for Federal Assistance SF-424**16. Congressional Districts Of:**

* a. Applicant 00-000

* b. Program/Project 00-000

Attach an additional list of Program/Project Congressional Districts if needed.

Add Attachment

Delete Attachment

View Attachment

17. Proposed Project:

* a. Start Date: 10/01/2020

* b. End Date: 09/30/2023

18. Estimated Funding (\$):

* a. Federal	300,000.00
* b. Applicant	0.00
* c. State	0.00
* d. Local	0.00
* e. Other	0.00
* f. Program Income	0.00
* g. TOTAL	300,000.00

*** 19. Is Application Subject to Review By State Under Executive Order 12372 Process?**

- ☐ a. This application was made available to the State under the Executive Order 12372 Process for review on .
- ☒ b. Program is subject to E.O. 12372 but has not been selected by the State for review.
- ☐ c. Program is not covered by E.O. 12372.

*** 20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes," provide explanation in attachment.)**☐ Yes ☒ No

If "Yes", provide explanation and attach

Add Attachment

Delete Attachment

View Attachment

21. *By signing this application, I certify (1) to the statements contained in the list of certifications and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances** and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)**

☒ ** I AGREE

** The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

Authorized Representative:

Prefix: Mr. * First Name: JOEL

Middle Name:

* Last Name: MARKLAND

Suffix:

* Title: CONSULTANT

* Telephone Number: 3175784233 Fax Number:

* Email: JMARKLAND@BCACONSULTANTS.COM

* Signature of Authorized Representative: JOEL MARKLAND * Date Signed: 12/03/2019